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Daniel Siret and Ignacio Requena



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Architectures of hyper-conditioned environments

Daniel Siret and Ignacio Requena

Terrace of COPPA Club, London, November 2016.



Credit: D. Siret

- 1 In the call for papers behind this thematic issue, we argued that conditioning techniques in architecture have now taken over many aspects of contemporary inhabited environments. Air is conditioned in terms of temperature and humidity, deodorised, and even potentially infused with substances governed by an emerging

psycho-chemistry¹. The so-called natural light, significantly anthropized by the filtering of increasingly complex glass products – even creating a “social territorialisation” with glazing² – is modulated day and night by artificial lighting devices, which can sometimes have fascinating effects³. The sounds of the environment and of human activities blend with informative, recreational or promotional signals that are disseminated in individual and collective sound bubbles with blurred boundaries. The sole visual appearance of the world is nowadays conditioned by screens and projections of various nature, and by the advent of augmented reality.

- 2 The converging implementation of conditioning techniques in the contemporary production of inhabited space leads to what we identified as “hyper-conditioned” environments. Ultimately, the resulting spaces no longer offer any connection with the (natural, urban) environment in which they are set. Decontextualized, they are thus defined by the fracture that they impose from the prevailing conditions around them. Hermetical, they can only be grasped from the inside, through immersion and personal or collective experience, which makes them resistant to the modalities of classical representation with a plan, drawing or picture. The retelling of an experience, of boards of bio-static indicators (temperatures, sound, light levels, chemistry, fluxes), ultimately become the most solid descriptive tools, as well as the most ambiguous, for these spaces.
- 3 Starting from this hypothesis, three perspectives for reflection were proposed to the authors. They respectively dealt with the experience of hyper-conditioned environments and new atmospheric aesthetics, nowadays indistinguishable from shopping malls and mobility environments, festive or sport locations, some work and housing places; with the transformation of the ways we conceive architecture, in particular the modes of representation, evaluation or experimentation for conditioned or re-conditioned environments; lastly, with hyper-conditioning as an influence on bodies and minds, the resulting vulnerability and the potential manipulations that are connected to it. We thus aimed at reactivating a thought process that had started in the 1930s with Lewis Mumford⁴, continued in the post-war period with Sigfried Giedion⁵ or Reyner Banham⁶, and that has now been widely studied for the past twenty years⁷.
- 4 Thirteen articles answered this call for papers, and six of them were selected to be part of this thematic issue. The articles do not address the entirety of the questions raised in the call for papers, but they allow for the highlighting of three general aspects of contemporary hyper-conditioning, which thus paves new ways for research and the deepening of knowledge. The first way considered hyper-conditioning as a condition for survival in uninhabitable or hostile environments. It invites us to think about the architectures of controlled milieus. The second way addresses the effects of hyper-conditioning as a hold on beings and souls. The point here is to reflect on alienating architectures and modalities for emancipation. The last way analyses hyper-conditioning as a new naturality and leads us to think about interface architectures in highly anthropized environments.

Hyper-conditioning as a condition for survival: thinking about the architectures of controlled milieus

- 5 Only one of the selected articles in this issue addresses hyper-conditioning as a condition for survival in hostile milieus. It is Christophe Camus’ article, dealing with

the underwater architecture experiments that took place between the 1960s and 1980s. The paper reveals how the explorers of the seabed, sea inhabitants and future “sealings” invent new spatial devices to create “a specific architecture of the sea, allowing men and women to fully blend in with the environment”, as Jacques Rougerie foresees it and is quoted in the article. From the outset, the architectures of these controlled milieus raise the question of the relation between humans and the environment in which they are. By exploring underwater architectures, Christophe Camus shows that conditioning does not prevent the preservation of a link, at least a visual one, with the marine environment. Enhancing that link is even a necessity for explorers of the sea, and the subject of technical feats. The inhabitant of the hyper-conditioned milieu thus becomes an amazed spectator, fully absorbed by a new experience: “looking at the underwater world with nothing to disturb his attention”, as Jacques Rougerie describes it.

- 6 Far from the underwater adventures of the 1960s, we can mention the popular success of the pictures of the Earth taken by contemporary astronauts in the hyper-conditioned environments of the international space station. The conditioning techniques here are ways to broaden the scope of architecture and to inhabit the uninhabitable. The controlled space is thus conceived as a prosthetics for the human body, allowing human beings to conquer extreme or hostile environments, to discover unique spectacles of the world, of the sea, of space, but also in deserts and at the poles, in extra-terrestrial places... The small number of articles on those matters for this thematic issue shows the lack of interest of our community for the architectures of extreme milieus. Dreams of extra-terrestrial, marine or spatial conquests are probably nowadays superseded by the necessity of the conscience of terrestrial limits in the face of the dangers that threaten our immediate ecosystems.

Hyper-conditioning as a hold on beings and souls: reflecting on alienating architecture and modalities for emancipation

- 7 With the control of physiological parameters that are essential to life, hyper-conditioned environment can have a hold on the beings inhabiting them. As such, their advent and development raise ethical questions regarding architecture. This theme is developed in Suzel Balez’s article regarding the conditioning of air. At the beginning of her paper, the author mentions one of Stanislas Lem’s most fascinating science fiction novels, *The Futurological Congress* (1971), which describes a dystopian world where the population lives under the influence of substances distilled in the air by an authoritarian power. Patrick Sunskind’s *Perfume: The Story of a Murderer* (1985) also comes to mind, whose hero, Jean-Baptiste Grenouille, learns how to manipulate human beings with smells. However, far from these extreme situations, Suzel Balez brings us to think about a more ordinary contemporary air by making explicit, with much precision, the known and potential effects of its conditioning. How can we think contemporary architecture in the face of such a technological-driven milieu? What ethics can the architect develop once he or she becomes aware of the influence of conditioning?

- 8 The theme of the hold and release is also at the heart of Anne Bossé and Théo Fort-Jacques' article. They use popular American films as a magnifying glass set on the conditioning forms of some ideal-typical contemporary architectures. The tower in *Die Hard* (a crystal trap, in the French subtitle, 1988), the city under the dome in *The Truman Show* (1998) and the casino in *Ocean's Eleven* (2001) represent alienating environments from which the heroes of the films are going to escape, at the cost of revealing the invisible technical hold of conditioning and a rebellion against the constraints they impose on them. Through the analysis of the situations in these films, the authors show that the emancipation from condition presumes a defamiliarization process that implies in particular a technical deciphering of the milieu, and the fact of showing behind the control. The possibility to destroy by sabotaging thus appears, a liberating and "de-conditioning" act in the films analysed. Anne Bossé and Théo Fort-Jacques thus invite us to consider the way we can abandon contemporary conditioning, know how "to go from the regime of hold, characterized by hyper-familiarity, to the regime of objectivity to be able to form a judgment on one's environment".
- 9 The theme of the hold, maintained by hyper-conditioned environments and the ways to free ourselves from them (for the inhabitants as well as for the architects), could call for new interesting contributions, in particular on the hyper-conditioning of the contemporary dominant architectures that are workspaces⁸, commercial spaces⁹, mobility spaces or even festive and well-being spaces. There is here a whole facet to explore and reveal the invisible conditioning technique taking place in the most ordinary living spaces. The modes of influence and their effects on uses need to be questioned, as well as the ethical dimensions of architectural and urban design.

Hyper-conditioning as new naturality: thinking about interface architectures in highly anthropized environments

- 10 Several articles in this thematic issue explore hyper-conditioning as a modality, among others, of contemporary urban life. The architectures of hyper-conditioned milieus are seen here in interface and dialogue situations between different forms of conditioning and non-conditioning or potential naturality.
- 11 Therefore, Valérie Foucher-Dufois and Laetitia Overney describe the Eden Park operation in the Rennes suburbs, France. It is formed by a set of housings organised around a hyper-conditioned tropical greenhouse. The aim is thus to understand, through a fine analysis of the practices and discourses, how this hyper-conditioned space is assimilated or not by the inhabitants of Eden Park, how it creates a dialogue with the housings conceived more ordinarily. The authors show with great accuracy the barriers that make the greenhouse little invested in, transforming it into a sort of spectacular décor to go in and out of one's home, and from certain domestic spaces. Empty stage of everyday life, the greenhouse ultimately only holds a symbolic role of promotion of the speculative building, as the inhabitants apparently prefer to stay at home, rather than to create a hypothetical community of neighbours through the social utopia represented by the greenhouse.
- 12 Sascha Roesler develops the question of hyper-conditioned naturality through urban gardens. The article highlights, throughout modern history, how the creation

techniques for urban gardens include the dimension of micro-climatic mastery, from hygrothermal regulations of vegetation to the control carried by the botanical greenhouses. Beyond their role in the mitigation of the urban heat island, the author develops the importance of parks and gardens in the sensitive experience of urban microclimates through the citizens' movements. Gardens would then be points of focus and enrichment of the climatic experience, which remains highly anthropized despite a seemingly natural aesthetics. Lastly, Sascha Roesler finds in this landscape approach of conditioning an opening towards new ways for the conditioning of interior spaces.

- 13 Madlen Kobi's analysis of local thermal practices in the Chongqing metropole, in the South-West of China is also set in that vein. Based on an ethnographic work, her article discusses the traditional opposition that is imposed by building physics between interior spaces, conceived as conditioned, if not hyper-conditioned, and exterior spaces, subjected to the so-called natural climate. The specificity of the chosen study field shows that when the environments do not manifest highly contrasted thermal conditions, the inhabitants' practices no longer distinguish clearly the limits between interior and exterior. Madlen Kobi thus proposes an analysis of urban environments as a succession of contiguous microclimates that integrate both a conditioning part and an unexpected one.
- 14 The theme of hyper-conditioning as a new naturality could have welcomed other articles questioning its technical and sensitive dimensions. While contemporary conditioning systems aim for a direct action on feelings and are integrated to space almost as an ambient technology¹⁰, the characterisation of physical conditions and conditions of use thus created deserve to be reconsidered¹¹. Similarly, the landscape approach of the immaterial dimensions of public space could have questioned the representations and stakes in connection. Often discussed partially with maps of physical phenomena (for example, temperatures, air chemistry, sound levels...) or of their sources (for example, smellscapes), the tools to describe and reproduce of these spaces remain little studied¹².

Grasping architecture by its environments

- 15 The articles in this thematic issue ultimately prove the point of raising the question of hyper-conditioning to shift the analysis and understanding of architecture towards new fields that are often little familiar for architects. Those are technical fields that accommodate environments to our contemporary demands, allowing to unveil the technological arsenal that governs seemingly familiar experiences. Those are also the fields of psychology and anthropology, allowing to describe the alienating potentials that are inherently associated with conditioning techniques. Reflecting on architecture through the lens of environment conditioning thus means recognising the different forms of anthropisation of the world and of technicisation of our lives, where so-called natural elements and human productions constantly dialogue and interfere. It also means considering the act of building in its ethical and political dimensions from an emancipation standpoint, or, at least, from the perspective of revealing the different forms of control of spaces.
- 16 With the concept of hyper-conditioning, the articles in this issue suggest understanding architecture through its *elements*, which should be understood in a new plurality: not the air indistinguishable from a common atmosphere but the multiple

respiratory bubbles, warmed, humidified, odorized, disinfected that we go through every day; not the earth as a shared ground but the multiple natural and social levels, subsoils and topsoil that organise our lives and sometimes affect each other¹³; not the original domestic fire but the multiple energies and modes of exchange from which depend the most common devices in our actions; not water for life but the multiple fluids that are channeled, transformed, polluted, processed and irrigate our spaces and sometimes threaten us... These new elements of contemporary architecture show the hold of humans on the world. Ensues then a necessary reflection on de-conditioning our lives, on the way to build envelopes that are not prisons, on the necessity to include conditioned worlds in the conception of landscape and to think about the interfaces between controlled milieus and still natural spaces. More broadly, the question of conditioning invites architecture itself to take position within a hyper-technical production line that is often nowadays out of its grasp.

NOTES

1. See for instance the *Hormonarium* project, presented by Décosterd and Rahm in 2002 during the eighth Venice Biennale of Architecture. See <http://www.philipperahm.com/data/projects/hormonarium/>
2. See Andrés Jaque, "Blue Sky Urbanism: The Socio-Territoriality of Ultra-Clear". *Collectivity*, a collaboration between e-flux Architecture and the 2019 Seoul Biennale of Architecture and Urbanism, 2019. See <https://www.e-flux.com/architecture/collectivity/304248/blue-sky-urbanism-the-socio-territoriality-of-ultra-clear/>
3. Such as those produced by the lighting system designed by Coelux, artificial skies in spring and artificial suns frozen in an eternal Mediterranean summer. See <https://www.coelux.com>
4. Lewis Mumford, *Technics and civilization*, New York, Harcourt-Brace, 1934.
5. Sigfried Giedion, *Mechanization takes command: a contribution to anonymous history*, New York, Oxford University Press, 1948.
6. Reyner Banham, *Architecture of the Well-Tempered Environment*, Chicago, University of Chicago Press, 1969.
7. For example, on conditioned air, see Gail Cooper, *Air-Conditioning America: Engineers and the Controlled Environment, 1900-1960*, Baltimore, John Hopkins University Press, 1998; Marsha E. Ackermann, *Cool Comfort: America's Romance With Air-Conditioning*, Washington, Smithsonian Institution Press, 2002.
8. See Thierry Pillon, "Les couleurs d'ambiance. L'exemple des bureaux dans les années 1950-1960", *Communications*, n°102, « Exercices d'ambiances. Présences, enquêtes, écritures », edited by Maxime Le Calvé and Olivier Gaudin, 2018.
9. A research topic opened by Philip Kotler's work in the early 1970s ("Atmospherics as a marketing tool", *Journal of Retailing*, 49:4, 1973) which continued in several contemporary works. For example, see Stephen Healy, "Atmospheres of consumption: Shopping as involuntary vulnerability", *Emotion Space and Society*, 10(1), 2014, DOI: 10.1016/j.emospa.2012.10.003; Christian Julmi, "Conquering new frontiers in research on store atmospheres: Kinetic and synesthetic qualities", *Ambiances*, 2016, [Online], DOI: 10.4000/ambiances.723

10. Malcolm McCullough, *Ambient commons: attention in the age of embodied information*. Boston, The MIT Press, 2013.

11. Such is the case for situations of localised micro-air conditioning (colder or warmer) integrated in public spaces that are studied by the AAU-CRENAU Laboratory with the Coolscales ANR research project.

12. On this topic, see Kate McLean's cartographic work on smell sources in public space, or that of Nerea Calvillo on Madrid's air pollution (see <http://intheair.es/realtime/intheairjs/>).

13. See *Parasite*, by South-Korean director Bong Joon-ho (winner of the Palme d'Or at the 2019 Cannes Film Festival), which brilliantly illustrates the interferences between the world "below" and "above" in contemporary South Korea. We can also note that a paper for this thematic issue was submitted on underground architecture; unfortunately, it did not come to fruition.

AUTHORS

DANIEL SIRET

Daniel Siret, Architect, PhD, authorised to supervise research, is a Research Fellow of the French Ministry of Culture at the Graduate School of Architecture of Nantes. Since 2015, he is the head of the Ambiances Architectures Urbanités Laboratory (AAU – UMR CNRS 1563), reuniting the CRENAU team in Nantes and the CRESSON team in Grenoble.

daniel.siret@aau.archi.fr

IGNACIO REQUENA

Ignacio Requena, Architect, PhD, is a Senior Lecturer at the Graduate School of Architecture of Nantes and a Researcher at the AAU-CRENAU Laboratory (UMR CNRS 1563). He coordinates the "Coolscales. The cooled urban space: technological, spatial and cultural perspectives" ANR Project.

ignacio.requena@crenau.archi.fr